

Response to Final Office Action Dated October 18, 2005**Page 2 of 7**

Applicants: Theresa A. Deisher, Darrell C. Conklin, Fenella Raymond, Thomas R. Bukowski,
Susan D. Holderman, Birgit Hansen, Paul O. Sheppard
Serial No.: 10/037,922

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-7. (Canceled).

8. (Currently amended) An isolated FGF homolog polypeptide selected from the group consisting of:

a) polypeptide molecules comprising an amino acid sequence as shown in SEQ ID NO: 2 from residue 28 (Glu) to residue 175 (Met);

~~b) allelic variants of (a); and~~

e) ~~b)~~ polypeptide molecules that are at least 80% identical to SEQ ID NO: 2 from amino acid residue 28 (Glu) to amino acid residue 175 (Met)

wherein said polypeptide bind to an FGF receptor or is capable of stimulating proliferation of cells derived from mesenchymal stem cells or their precursors.

9. (Currently amended) An isolated FGF homolog polypeptide selected from the group consisting of:

a) polypeptide molecules comprising an amino acid sequence as shown in SEQ ID NO: 2 from residue 28 (Glu) to residue 196 (Lys);

~~b) allelic variants of (a); and~~

e) ~~b)~~ polypeptide molecules that are at least 80% identical to SEQ ID NO: 2 from amino acid residue 28 (Glu) to amino acid residue 196 (Lys)

wherein said polypeptide binds to an FGF receptor or is capable of stimulating proliferation of cells derived from mesenchymal stem cells or their precursors.

10. (Currently amended) An isolated FGF homolog polypeptide selected from the group consisting of:

a) polypeptide molecules comprising an amino acid sequence as shown in SEQ ID NO: 2 from residue 28 (Glu) to residue 207 (Ala);

~~b) allelic variants of (a); and~~

e) ~~b)~~ polypeptide molecules that are at least 80% identical to the amino acids of SEQ ID NO: 2 from amino acid residue 28 (Glu) to amino acid residue 207 (Ala)

Response to Final Office Action Dated October 18, 2005

Page 3 of 7

Applicants: Theresa A. Deisher, Darrell C. Conklin, Fenella Raymond, Thomas R. Bukowski,
Susan D. Holderman, Birgit Hansen, Paul O. Sheppard
Serial No.: 10/037,922

wherein said polypeptide binds to an FGF receptor or is capable of stimulating proliferation of cells derived from mesenchymal stem cells or their precursors.

11. (Original) The FGF homolog polypeptide of claim 8 further comprising a signal sequence.

12. (Original) The FGF homolog polypeptide of claim 8 further comprising a signal sequence as shown in SEQ ID NO: 2 from amino acid residue 1 (Met) to amino acid residue 27 (Ala).

13. (Original) A pharmaceutical composition comprising a purified FGF homolog polypeptide according to claim 8, in combination with a pharmaceutically acceptable vehicle.

14.-20. (Canceled).

21. (Previously presented) An isolated FGF homolog polypeptide of claim 8 wherein said polypeptide is at least 90% identical to SEQ ID NO: 2 from amino acid residue 28 (Glu) to amino acid residue 175 (Met).

22. (Previously presented) An isolated FGF homolog polypeptide of claim 8 wherein said polypeptide is at least 95% identical to SEQ ID NO: 2 from amino acid residue 28 (Glu) to amino acid residue 175 (Met).

23. (Previously presented) An isolated FGF homolog polypeptide of claim 8 wherein said polypeptide is at least 90% identical to SEQ ID NO: 2 from amino acid residue 28 (Glu) to amino acid residue 196 (Lys).

24. (Previously presented) An isolated FGF homolog polypeptide of claim 8 wherein said polypeptide is at least 95% identical to SEQ ID NO: 2 from amino acid residue 28 (Glu) to amino acid residue 196 (Lys).

Response to Final Office Action Dated October 18, 2005

Applicants: Theresa A. Deisher, Darrell C. Conklin, Fenella Raymond, Thomas R. Bukowski,
Susan D. Holderman, Birgit Hansen, Paul O. Sheppard
Serial No.: 10/037,922

25. (Previously presented) An isolated FGF homolog polypeptide of claim 8 wherein said polypeptide is at least 90% identical to SEQ ID NO: 2 from amino acid residue 28 (Glu) to amino acid residue 207 (Ala).

26. (Previously presented) An isolated FGF homolog polypeptide of claim 8 wherein said polypeptide is at least 95% identical to SEQ ID NO: 2 from amino acid residue 28 (Glu) to amino acid residue 207 (Ala).

27. (Previously presented) The FGF homolog polypeptide of claim 9 further comprising a signal sequence.

28. (Previously presented) The FGF homolog polypeptide of claim 9 further comprising a signal sequence as shown in SEQ ID NO: 2 from amino acid residue 1 (Met) to amino acid residue 27 (Ala).

29. (Previously presented) A pharmaceutical composition comprising a purified FGF homolog polypeptide according to claim 9, in combination with a pharmaceutically acceptable vehicle.

30. (Previously presented) The FGF homolog polypeptide of claim 10 further comprising a signal sequence.

31. (Previously presented) The FGF homolog polypeptide of claim 10 further comprising a signal sequence as shown in SEQ ID NO: 2 from amino acid residue 1 (Met) to amino acid residue 27 (Ala).

32. (Previously presented) A pharmaceutical composition comprising a purified FGF homolog polypeptide according to claim 10, in combination with a pharmaceutically acceptable vehicle.

33. (Currently amended) An isolated FGF homolog polypeptide selected from the group consisting of:

a) polypeptide molecules comprising an amino acid sequence as shown in SEQ ID NO: 2 from residue 58 (Tyr) to residue 175 (Met);

Response to Final Office Action Dated October 18, 2005

Page 5 of 7

Applicants: Theresa A. Deisher, Darrell C. Conklin, Fenella Raymond, Thomas R. Bukowski,
Susan D. Holderman, Birgit Hansen, Paul O. Sheppard
Serial No.: 10/037,922

~~b) — allelic variants of (a); and~~

e) b) polypeptide molecules that are at least 80% identical to SEQ ID NO: 2 from amino acid residue 58 (Tyr) to amino acid residue 175 (Met)

wherein said polypeptide binds to an FGF receptor or is capable of stimulating proliferation of cells derived from mesenchymal stem cells or their precursors.

34. (Currently amended) An isolated FGF homolog polypeptide selected from the group consisting of:

a) polypeptide molecules comprising an amino acid sequence as shown in SEQ ID NO: 2 from residue 58 (Tyr) to residue 196 (Lys);

~~b) — allelic variants of (a); and~~

e) b) polypeptide molecules that are at least 80% identical to SEQ ID NO: 2 from amino acid residue 58 (Tyr) to amino acid residue 196 (Lys)

wherein said polypeptide binds to an FGF receptor or is capable of stimulating proliferation of cells derived from mesenchymal stem cells or their precursors.

35. (Currently amended) An isolated FGF homolog polypeptide selected from the group consisting of:

a) polypeptide molecules comprising an amino acid sequence as shown in SEQ ID NO: 2 from residue 58 (Tyr) to residue 207 (Ala);

~~b) — allelic variants of (a); and~~

e) b) polypeptide molecules that are at least 80% identical to the amino acids of SEQ ID NO: 2 from amino acid residue 58 (Tyr) to amino acid residue 207 (Ala)

wherein said polypeptide binds to an FGF receptor or is capable of stimulating proliferation of cells derived from mesenchymal stem cells or their precursors.